

7.1 Literature Review

Several references that highlighted the design and safety aspects of bikeway systems were reviewed for this portion of the study. A review of the titles and subtitles should reveal that cyclists are not being considered the exclusive users of all bicycle facilities, especially on Class 1 type paths. These publications included comprehensive literature reviews, technical design criteria and case studies:

- *Bicycle Transportation - A Guide for Cycling Transportation Engineers*, Second Edition, John Forester
- *Guide for the Development of Bicycle Facilities*, American Association of State Highway and Transportation Officials (AASHTO)
- *Bicycle Blueprint - A Plan to Bring Bicycling into the Mainstream in New York City*, Transportation Alternatives
- *Pedestrian and Bicyclist Safety - A Review of Key Programs and Countermeasure Developments During the 1980's*, University of North Carolina Highway Research Safety Center
- *The National Bicycling and Walking Study - Transportation Choices for a Changing America*, U.S. Dept. of Transportation, Federal Highway Administration
- *Technical Handbook of Bikeway Design - Planning, Design, Implementation*, Second Edition, Velo Quebec, Ministère des Transports du Québec

7.2 User Types and Capabilities

Users can be classified using a number of criteria such as their ages, their cycling experience and physical condition, for examples, to come up with a profile of the types of users expected to make use of a particular bikeway system. Such a user classification is very useful for bikeway planning purposes.

7.2.1 User Classification

The American Association of State Highway and Transportation Officials (AASHTO) has

developed a revised edition of their widely used Guide for the Development of Bicycle Facilities. The new edition contains a cyclist classification system to assist in the selection of appropriate facilities. The classification system is as follows:

- Group A - Advanced Bicyclists (Experienced): Group A bicyclists fall into two categories; commuting/utility and sports /touring.
- Group B - Basic Bicyclists (casual, novice, occasional, recreational)
- Group C - Children (preteen)

AASHTO estimates that only about five percent of the cycling population are experienced cyclists. Though there are no data to support this estimate, this is probably accurate enough for general use in the United States. (See Figure 7-3: Bikeway User Classification.)

AASHTO states that, in most circumstances, Group B and Group C cyclists can be combined. However, Group C cyclists are much more likely to ride almost daily, and especially to ride bicycles to and from schools during mornings and afternoons most of the year. This would also include Group B teens. The majority of Group B adult cyclists are more likely to ride on weekends and some evenings during the summer since they are more likely to be riding for recreation rather than for commuting. More importantly, the groups also tend to ride on different types of streets. Group C cyclists tend to stay in residential areas, while Group B cyclists will tend to ride on busier streets if there is sufficient width and bike lanes. Parents will usually not allow their young children to ride on busy streets, even ones with bike lanes. Group A cyclists are accustomed to riding on busy streets, with or without bike lanes.